

We trust that this invaluable work of reference on palæartic birds will be pushed to an early completion.— W. S.

**Economic Value of Wild Birds in South Africa.**— Dr. H. E. Warren, Director of the Natal Museum has recently published<sup>1</sup> an instructive summary of the relation of South African birds to agriculture. Dr. Warren comments on the abundance of birds in certain European countries and attributes their numbers in large part to the prevalence of hedges which furnish shelter and nesting sites. A noticeable scarcity of birds in South Africa is thought to be due to excessive clearing, the lack of hedges, and to the destructive activities of native and white boys.

The following groups of birds are said to be beneficial: owls, kestrels, the Tetraonidæ, coucals, woodpeckers, barbets, hoopoes, Caprimulgidæ, rollers, and cuckoos. Special mention is made of locust birds, including the white stork, the white-bellied stork, pratincoles, wattled starling and the hadadah ibis. Other groups coming in for commendation are the plovers, lapwing, cranes, the secretary-bird, ground hornbill, kites and certain other birds-of-prey. The birds mentioned as injurious include bulbuls, mouse-birds, and the pied starling.— W. L. M.

**Bird Enemies of Diabroticas.**— Two of the recent contributions from the U. S. Bureau of Entomology, published in the new series of Bulletins of the Department of Agriculture contain notes on the bird enemies of destructive beetles. The southern corn rootworm (*Diabrotica duodecimpunctata*), the adult of which is usually known as the spotted cucumber beetle, is a serious pest. High percentages of the stand of corn in some localities are damaged and this in addition to losses among cucurbit and other crops contribute to a total damage amounting to many thousands of dollars. The ubiquitous beetle responsible for this mischief is eaten by many birds. A list of 24 species furnished by the Biological Survey is published<sup>2</sup> by Professor F. M. Webster, the author of the two bulletins here mentioned.

A closely related beetle, the western corn rootworm (*Diabrotica longicornis*), causes the same sort of damage as its congener, and to a corresponding extent in its more limited range. The Biological Survey was able to furnish<sup>3</sup> the names of only two bird enemies of this pest, namely the night-hawk and the wood pewee.— W. L. M.

**Shelford's 'Animal Communities in Temperate America.'**<sup>4</sup>— With the chief exceptions of investigations in Michigan under Adams and

<sup>1</sup> Agr. Journ. of South Africa. VI, No. 3. Sept. 1913, pp. 461-465.

<sup>2</sup> Bull. No. 5, U. S. Dept. of Agriculture, Sept. 1913, p. 9.

<sup>3</sup> Bull. No. 8, U. S. Dept. of Agriculture, Sept. 1913, p. 6.

<sup>4</sup> Shelford, V. E. Animal Communities in Temperate America as illustrated in the Chicago region. Bull. No. 5, Geog. Soc. of Chicago, October, 1913, 362 pp.